

Applicant(s): S. Jayaraman
Application No.: 10/696,174
Examiner: S. Gherbi

Amendments to the Claims

1. (currently amended) A method for treating a ~~vascular disease~~ of a patient with an intravascular implant, the method comprising:
diagnosing the patient as having a vascular disease;
determining a prevalent ~~identifying an existing~~ disease process in the pathology of the vascular disease;
selecting a first agent to treat or prevent the prevalent ~~existing~~ disease process of the vascular disease;
coating at least a portion of the intravascular implant with a therapeutically effective amount of the first agent; and
implanting the intravascular implant in the patient.
2. (currently amended) A method as defined in claim 1 wherein the disease process is determined ~~identified~~ using genetic determination to identify differently expressed genes in the disease process.
- 3-4. (canceled)
5. (previously presented) A method as defined in claim 6 wherein the first agent is a macrolide immunosuppressant.
6. (currently amended) A method as defined in claim 2 further including selecting a second agent to treat or prevent the prevalent ~~existing~~ disease process of the vascular disease, and wherein coating at least a portion of the intravascular implant with a therapeutically effective amount of the first agent includes coating at least a portion of the intravascular implant with a therapeutically effective amount of the second agent.

Applicant(s): S. Jayaraman
Application No.: 10/696,174
Examiner: S. Gherbi

7. (original) A method as defined in claim 6 wherein the second agent is selected from the group consisting of an anti-inflammatory agent, non-proliferative agent, anti-coagulant, anti-platelet agent, Tyrosine Kinase inhibitor, anti-infective agent, anti-tumor agent, anti-leukemic agent and a combination thereof.
8. (previously presented) A method as defined in claim 2 wherein coating at least a portion of the intravascular implant includes coating at least a portion of the intravascular implant with a polymer matrix.
9. (original) A method as defined in claim 8 wherein the polymer matrix includes a bioabsorbable polymer.
10. (original) A method as defined in claim 9 wherein the bioabsorbable polymer is selected from the group consisting of poly- α hydroxy acids, polyglycols, polytyrosine carbonates, starch, gelatins, cellulose and combinations thereof.
11. (original) A method as defined in claim 10 wherein the therapeutically effective amount of the first agent is dispersed within the bioabsorbable polymer.
12. (previously presented) A method as defined in claim 2 wherein the intravascular implant is selected from the group consisting of a balloon catheter, stent, stent graft, drug delivery catheter, atherectomy device, filter, scaffolding device, anastomotic clip, anastomotic bridge, suture material, wire, embolic coil and a combination thereof.
13. (original) A method as defined in claim 12 wherein the intravascular implant includes a primer layer upon which the coating is applied.

Applicant(s): S. Jayaraman
Application No.: 10/696,174
Examiner: S. Gherbi

14. (currently amended) A method as defined in claim 13 wherein the primer layer includes ~~one of~~ a bioabsorbable polymer and or a biostable polymer.

15. (canceled)

16. (original) A method as defined in claim 13 further including a top coat applied over the coating.

17. (canceled)

18. (currently amended) A method of making a therapeutically coated intravascular implant for treating a vascular disease, the method comprising:

determining a prevalent disease process in the pathology of a vascular disease of a patient;

selecting a first agent to treat or prevent the prevalent disease process of the vascular disease; and

coating at least a portion of the intravascular implant with a therapeutically effective amount of the first agent.

~~A method as defined in claim 17~~ wherein the disease process is determined identified using genetic determination to identify differently expressed genes in the disease process;

19. (previously presented) A method as defined in claim 18 wherein the disease process is selected from the group consisting of acute myocardial infarction, thrombotic lesions, unstable angina, fibrotic disease, total occlusion, hyperproliferative vascular disease, vulnerable plaque, diabetic vascular diffused disease and a combination thereof.

20. (previously presented) A method as defined in claim 19 further including selecting a second agent to treat or prevent the disease process of the vascular disease, and wherein coating

Applicant(s): S. Jayaraman
Application No.: 10/696,174
Examiner: S. Gherbi

at least a portion of the intravascular implant with a therapeutically effective amount of the first agent includes coating at least a portion of the intravascular implant with a therapeutically effective amount of the second agent.

21. (original) A method as defined in claim 20 wherein the first agent is rapamycin.
22. (original) A method as defined in claim 21 wherein the second agent is selected from the group consisting of an anti-inflammatory agent, non-proliferative agent, anti-coagulant, anti-platelet agent, Tyrosine Kinase inhibitor, anti-infective agent, anti-tumor agent, anti-leukemic agent and a combination thereof.
- 23-25. (canceled)
26. (currently amended) A method as defined in claim 1, wherein determining ~~identifying~~ the disease process is performed during a first procedure on the patient and implanting the intravascular implant is performed during a second procedure.
27. (currently amended) A method as defined in claim 1, wherein determining ~~identifying~~ the disease process and implanting the intravascular implant are performed during one procedure at a procedure site.
28. (previously presented) A method as defined in claim 27, wherein coating the intravascular implant is performed at the procedure site.
29. (new) A method for treating a patient with an intravascular implant, the method comprising:
diagnosing the patient as having a vascular disease;
determining a prevalent disease process in the pathology of the vascular disease;

Applicant(s): S. Jayaraman
Application No.: 10/696,174
Examiner: S. Gherbi

selecting a first therapeutic agent to treat or prevent the prevalent disease process of the vascular disease;

coating at least a portion of the intravascular implant with a therapeutically effective amount of the first therapeutic agent and rapamycin; and
implanting the intravascular implant in the patient.

30. (new) A method as defined in claim 29, wherein the intravascular implant is selected from the group consisting of a balloon catheter, stent, stent graft, drug delivery catheter, atherectomy device, filter, scaffolding device, anastomotic clip, anastomotic bridge, suture material, wire, embolic coil and a combination thereof.

31. (new) A method as defined in claim 30, wherein the first therapeutic agent is selected from the group consisting of an anti-inflammatory agent, non-proliferative agent, anti-coagulant, anti-platelet agent, Tyrosine Kinase inhibitor, anti-infective agent, anti-tumor agent, anti-leukemic agent, and a combination thereof.

32. (new) A method as defined in claim 31, wherein the first therapeutic agent is a PDGF.

33. (new) A method as defined in claim 32, wherein the first therapeutic agent is GLEEVEC.